

DT05 Rec'd PCT/PTO 0 1 DEC 2004

PTS-0055USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : unassigned Confirmation No.: unassigned
Applicant : Bennett et al.
Filed : Herewith
TC/A.U. : unassigned
Examiner : unassigned
Customer No. : 36441
Title : ANTISENSE MODULATION OF EXTRACELLULAR-
SIGNAL-REGULATED KINASE-6 EXPRESSION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants submit to the Examiner the attached Form PTO/SB/08A/B document listing and this paper pursuant to 37 CFR § 1.56 and § 1.97-1.98. Form PTO/SB/08A/B is attached and copies of documents AL-AN and AR-CR are enclosed herewith. This Information Disclosure Statement is submitted less than three months from the filing date of this application and before the receipt of a first Office Action on the merits. Therefore, no fees are believed due.

The Director is hereby authorized to charge any deficiency in any fees due with the filing of this paper or credit any overpayment in any fees to our Deposit Account Number 08-3040.

REMARKS

Listed below and provided herewith are previously filed, and co-pending, US Patent applications. These applications and the present application are commonly owned:

- (i) U.S. Patent Application No. 10/174,465, filed June 17, 2002; U.S. Patent Publication No. 2003-0232772, published December 18, 2003
- (ii) U.S. Patent Application No. 10/348,431, filed January 17, 2003; U.S. Patent Publication No. 2003-0232778, published December 18, 2003

Listed below are documents cited in the International Search Report dated August 18, 2003 in the counterpart International Patent Application No. PCT/US03/16214, filed June 16, 2003. A copy of the Report is enclosed together with copies of the documents.

- (i) U.S. Patent No. 5,801,154, issued September 1, 1998
- (ii) U.S. Patent No. 6,030,822, issued February 29, 2000
- (iii) U.S. Patent Publication No. 2002-0107218, published August 1, 2002
- (iv) DINEV et al., "Extracellular signal regulated kinase 5 (ERK5) is required for the differentiation of muscle cell", EMBO Reports September 2001 2:829-834

- (v) FRITZ et al., "Cationic polystyrene nonparticles: Preparation and characterization of a model drug carrier system for antisense oligonucleotides", J. Colloid and Interface Sci. November 15, 1997 195:272-288

The Examiner is respectfully requested to consider the enclosed documents identified in this paper and in the attached Form PTO/SB/08A/B during the course of examination of this application.

Respectfully submitted,

HOWSON AND HOWSON
Attorneys for Applicants

By Mary E. Bak
Mary E. Bak
Registration No. 31,215
Spring House Corporate Center
Box 457
Spring House, PA 19477
Telephone: (215) 540-9200
Telefacsimile: (215) 540-5818

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	unassigned
				Filing Date	Herewith
				First Named Inventor	Bennett et al.
				Group Art Unit	unassigned
				Examiner Name	unassigned
Sheet	2	of	4	Attorney Docket Number	PTS-0055USA

NONPATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AR	BOPPART et al., "Marathon running transiently increases c-Jun NH2-terminal kinase and p38 activities in human skeletal muscles", <i>J. Physiol.</i> August 1, 2000 526 Pt. 3:663-669	
	AS	CONRAD et al., "Novel regulation of p38 gamma by dopamine D2 receptors during hypoxia", <i>Cell Signal.</i> July 2000 12:463-467	
	AT	DINEV et al., "Extracellular signal regulated kinase 5 (ERK5) is required for the differentiation of muscle cell", <i>EMBO Reports</i> September 2001 2:829-834	
	AU	ENGLISH et al., "Pharmacological inhibitors of MAPK pathways", <i>Trends Pharm. Sci.</i> January 2002 23:40-45	
	AV	ENSLIN et al., "Molecular determinants that mediate selective activation of p38 MAP kinase isoforms", <i>EMBO J.</i> March 15, 2000 19:1301-1311	
	AW	FRITZ et al., "Cationic polystyrene nonparticles: Preparation and characterization of a model drug carrier system for antisense oligonucleotides", <i>J. Colloid and Interface Sci.</i> November 15, 1997 195:272-288	
	AX	GOEDERT et al., "Assignment of the human stress-activated protein kinase-3 gene (SAPK3) to chromosome 22q13.3 by fluorescence in situ hybridization", <i>Genomics</i> May 1, 1997 41:501-502	

Examiner Signature	Date Considered
--------------------	-----------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETE FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	unassigned
				Filing Date	Herewith
				First Named Inventor	Bennett et al.
				Group Art Unit	unassigned
				Examiner Name	unassigned
Sheet	3	of	4	Attorney Docket Number	PTS-0055USA

NONPATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AY	GOEDERT et al., "Phosphorylation of microtubule-associated protein tau by stress-activated protein kinases", <i>FEBS Lett.</i> June 2, 1997 409:57-62	
	AZ	HADDAD, J.J., "VX-745. Vertex Pharmaceuticals", <i>Curr. Opin. Investig. Drugs</i> August 2001 2:1070-1076	
	BR	LECHNER et al., "ERK6, a mutagen-activated protein kinase involved in C2C12 myoblast differentiation", <i>Proc. Natl. Acad. Sci. USA</i> April 30, 1996 93:4355-4359	
	BS	LECHNER et al., Genbank Accession No. X79483, May 27, 1994	
	BT	LEE et al., "Distinct localization of SAPK isoforms in neurons of adult mouse brain implies multiple signaling modes of SAPK pathway", <i>Brain Res. Mol. Brain Res.</i> June 18, 1999 70:116-124	
	BU	LI et al., "The primary structure of p38 gamma: a new member of p38 group of MAP kinases", <i>Biochem. Biophys. Res. Commun.</i> November 12, 1996 228:334-340	
	BV	MARINISSEN et al., "A network of mitogen-activated protein kinases links G protein-coupled receptors to the c-jun promoter: a role for c-jun NH2-terminal kinase, p38γ, and extracellular signal-regulated kinase 5", <i>Mol. And Cell. Bio.</i> June 1999 19(6):4289-4301	
	BW	MARINISSEN et al., "Regulation of gene expression by the small GTPase Rho through the ERK6 (p38gamma) MAP kinase pathway", <i>Genes Dev.</i> March 1, 2001 15:535-553	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETE FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

DT05 Rec'd PCT/PTO 01 DEC 2004.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete if Known	
				Application Number	unassigned
				Filing Date	Herewith
				First Named Inventor	Bennett et al.
				Group Art Unit	unassigned
				Examiner Name	unassigned
Sheet	4	of	4	Attorney Docket Number	PTS-0055USA

NONPATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	BX	MILLIGAN et al., "Current concepts in antisense drug design", <i>J. of Med. Chem.</i> July 9, 1993 36:1923-1937	
	BY	PILLAIRE et al., "Cisplatin and UV radiation induce activation of the stress-activated protein kinase, p38s in human melanoma cells", <i>Biochem. And Biophys. Research Comm.</i> November 30, 2000 278:724-728	
	BZ	SAKABE et al., "Potent transforming activity of the small GTP-binding protein Rit in HIH 3T3 cells: evidence for a role of a p38γ-dependent signaling pathway", <i>FEBS Lett.</i> January 30, 2002 511:15-20	
	CR	WANG et al., "Involvement of the MKK6-p38γ cascade in γ-radiation-induced cell cycle arrest", <i>Mol. And Cell. Bio.</i> July 2000 20:4543-4552	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETE FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.